

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1 - 7. (Cancelled)

8. (Currently Amended) Production process of an integrated micro-system type component, comprising a flat suspended micro-structure arranged on an embedding layer, the process successively comprising:

deposition of a sacrificial layer of polymer material on a substrate,

patterning of the sacrificial layer defining sidewalls of the sacrificial layer,

deposition, on at least part of the substrate and on at least part of the front face of the sacrificial layer, of the embedding layer presenting a larger thickness than the thickness of the sacrificial layer, the embedding layer surrounding the sacrificial layer, an interface being formed between the sidewalls of the sacrificial layer and internal sidewalls of the embedding layer,

planarization of the embedding layer such that the front face of the sacrificial layer and a front face of the embedding layer form a common flat surface, the embedding layer still surrounding the sacrificial layer,

deposition of a formation layer of the suspended structure on a front face of the common flat surface,

etching at least one opening in the formation layer up to the level of the front face of the sacrificial layer, and

etching of the sacrificial layer through said opening such that the suspended structure is suspended over a space whose endpoints are defined by side walls of the embedding layer,

wherein the planarization step successively comprises a chemical mechanical polishing sub-step of the embedding layer and an etching sub-step of the embedding layer so that the front faces of the sacrificial layer and of the embedding layer form a common flat surface.

9. (Previously Presented) Production process according to claim 8, wherein the planarization step comprises chemical mechanical polishing.

10. (Canceled)

11. (Previously Presented) Production process according to claim 8, wherein the side walls of the sacrificial layer are confined by etching by means of a mask formed on the front face of a layer made from polymer material by deposition, lithography and etching of a temporary layer, deposition of the embedding layer being performed on the assembly formed by the sacrificial layer and the mask, the mask being eliminated in the course of the planarization step.

12. (Previously Presented) Production process according to claim 11, wherein the planarization step comprises an etching step of the mask.

13. (Currently Amended) Production process of an integrated micro-system type component, comprising a flat suspended micro-structure, using a sacrificial layer of polymer material deposited on a substrate and having side walls confining the flat suspended structure, process successively comprising a planarization step, a deposition step of a formation layer of the suspended structure, an etching step of at least one opening of the formation layer up to the level of the front face of the sacrificial layer and a dry etching step of the sacrificial layer, process comprising, between deposition of the sacrificial layer and the planarization step, a deposition step, on at least a part of the substrate and of the front face of the sacrificial layer, of an embedding layer presenting a larger thickness than the thickness of the sacrificial layer, the embedding layer surrounding the sacrificial layer so as to form an interface between the

sidewalls of the sacrificial layer and internal sidewalls of the embedding layer, so that, after the planarization step, the front faces of the sacrificial layer and of the embedding layer form a common flat surface and the embedding layer still surrounds the sacrificial layer, the formation layer of the suspended structure being deposited on the front face of the common flat surface, wherein, the component comprising salient elements on the substrate, the process successively comprises, before deposition of the sacrificial layer, deposition on at least one zone of the substrate designed to be covered by the sacrificial layer and comprising salient elements, of a base layer presenting a larger thickness than the thickness of the salient elements, and an additional planarization step, by chemical mechanical polishing, of the base layer so that the front faces of the base layer and of the salient elements form a common flat surface.

14. (Canceled)